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Announcing The Availability of Industry Cash Flow Spreadsheets

Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Qtr 2, 2009)

The Georgia Tech Financial Analysis Lab is pleased to announce the availability of detailed spreadsheet data chronicling trends in free cash margin and its component factors for the 20 four-digit GICS industry sectors and the 61 six-digit GICS non-financial industries we follow. The data is available for download on our website, www.mgt.gatech.edu/finlab. In this research report we highlight these findings for the second quarter of 2009 and examine the results for several individual companies.

For the twelve months ended June 2009, eight industry sectors reported improved free cash margin from the same period in 2008, while two sectors saw free cash margin decline. Ten sectors saw their free cash margin remain relatively stable.

Individual companies with improved free cash margin that are examined in this report are Home Depot Inc (HD), Campbell Soup Co. (CPB), and Archer-Daniels-Midland Co. (ADM). Companies with declining free cash margin examined here are Merck & Co. (MRK), Pacific Gas & Electric Co. (PCG), and Southern Co. (SO).

Data for this research were provided by Cash Flow Analytics, LLC., www.cashflowanalytics.com. Charles Mulford is a principal in Cash Flow Analytics, LLC. October, 2009

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Georgia Tech Financial Analysis Lab

The Georgia Tech Financial Analysis Lab conducts research on issues of financial reporting and analysis. Unbiased information is vital to effective investment decision-making. Accordingly, we think that independent research organizations, such as our own, have an important role to play in providing information to market participants.

Because our Lab is housed within a university, all of our research reports have an educational quality, as they are designed to impart knowledge and understanding to those who read them. Our focus is on issues that we believe will be of interest to a large segment of stock market participants. Depending on the issue, we may focus our attention on individual companies, groups of companies, or on large segments of the market at large.

A recurring theme in our work is the identification of reporting practices that give investors a misleading signal, whether positive or negative, of corporate earning power. We define earning power as the ability to generate a sustainable stream of earnings that is backed by cash flow. Accordingly, our research may look into reporting practices that affect either earnings or cash flow, or both. At times, our research may look at stock prices generally, though from a fundamental and not technical point of view.

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Cash Flow Trends and Their Fundamental Drivers: Comprehensive Industry Review (Qtr 2, 2009)

Industries Identified in This Report (with GICS)

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Companies Identified in This Report

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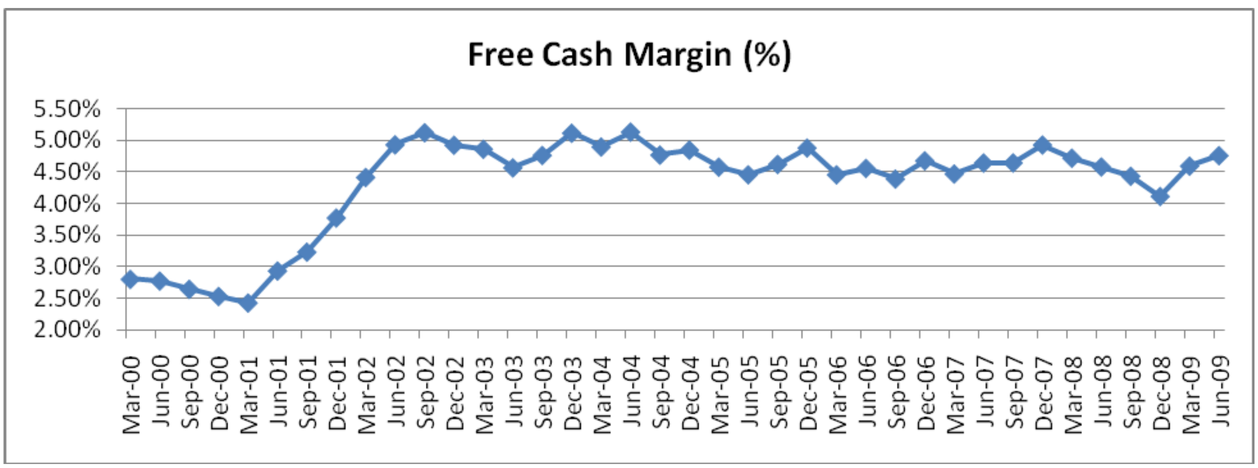
**Cash Flow Trends and Their Fundamental Drivers:
Comprehensive Industry Review (Qtr 2, 2009)**

Introduction

In this research report, we announce the availability of our industry spreadsheets that detail trends in free cash margin and its underlying drivers for 20 separate four-digit GICS industry sectors and 61 six-digit GICS industries. The spreadsheets, which will be updated quarterly, can be found on the Lab's website at www.mgt.gatech.edu/finlab.

In an earlier report dated September 2009, titled, "Cash flow trends and their fundamental drivers: A continuing look summary review (Qtr 2, 2009)," we examined the trend of free cash margin and its underlying drivers for the overall U.S. economy. In that report, we employed data for all non-financial firms with market caps exceeding $50 million. A total of 3,518 firms were included in our analysis. Our earlier findings indicated that even though overall free cash margin has increased, the increase occurred even as profitability, measured as operating cushion or operating profit before depreciation, declined. The increase in free cash margin in the twelve months ended June, 2009 was a direct result of reductions in capital expenditures and the cash cycle or the length of time corporate funds are tied up in working capital. Such an improvement in free cash margin is not sustainable. If operating profitability does not turn up, the expectation is that free cash margin will likely decline again, making the "V" formation more of a "W". We provide a graph of free cash margin for all non-financial industries below.

All Non-financials, 2000 – Q2 2009



In this report, we look at the industry results and focus our attention on the cash flow performance of several companies in those industries that stood out with improving free cash margin and in those that suffered from significant declines in free cash margin.

Industries

The 20 four-digit GICS industry sectors and 61 six-digit GICS sub-industries are as follows:

- **Energy – 1010**
- Energy Equipment & Services – 101010
- Oil, Gas & Consumable Fuels – 101020
- **Materials – 1510**
- Chemicals – 151010
- Construction Materials – 151020
- Containers & Packaging – 151030
- Metals & Mining – 151040
- Paper & Forest Products – 151050
- **Capital Goods – 2010**
- Aerospace & Defense – 201010
- Building Products – 201020
- Construction & Engineering – 201030
- Electrical Equipment – 201040
- Industrial Conglomerates – 201050
- Machinery – 201060
- Trading Companies & Distributors – 201070
- **Commercial & Professional Services – 2020**
- Commercial Services & Supplies – 202010
- Professional Services – 202020
- **Transportation – 2030**
- Air Freight & Logistics – 203010
- Airlines – 203020
- Marine – 203030
- Road & Rail – 203040
- Transportation Infrastructure – 203050
- **Automobiles & Components – 2510**
- Auto Components – 251010
- Automobiles – 251020
- **Consumer Durables & Apparel – 2520**
- Household Durables – 252010
- Leisure Equipment & Products – 252020
- Textiles, Apparel & Luxury Goods – 252030
- **Consumer Services – 2530**
- Hotels, Restaurants & Leisure – 253010
- Diversified Consumer Services – 253020
- **Media – 2540**
- Media – 254010
- **Retailing – 2550**
- Distributors – 255010
- Internet & Catalog Retail – 255020
- Multiline Retail – 255030
- Specialty Retail – 255040

- **Food & Staples Retailing – 3010**
- Food & Staples Retailing – 301010
- **Food Beverage & Tobacco – 3020**
- Beverages – 302010
- Food Products – 302020
- Tobacco – 302030
- **Household & Personal Products – 3030**
- Household Products – 303010
- Personal Products – 303020
- **Health Care Equipment & Services – 3510**
- Health Care Equipment & Supplies – 351010
- Health Care Providers & Services – 351020
- Health Care Technology – 351030
- **Pharmaceuticals, Biotechnology & Life Sciences – 3520**
- Biotechnology – 352010
- Pharmaceuticals – 352020
- Life Sciences Tools & Services – 352030
- **Software & Services – 4510**
- Internet Software & Services – 451010
- It Services – 451020
- Software – 451030
- **Technology Hardware & Equipment - 4520**
- Communications Equipment – 452010
- Computers & Peripherals – 452020
- Electronic Equipment, Instruments & Components – 452030
- Office Electronics – 452040
- Semiconductor Equipment & Products – 452050
- **Semiconductors & Semiconductor Equipment – 4530**
- Semiconductors & Semiconductor Equipment – 453010
- **Telecommunication Services – 5010**
- Diversified Telecommunication Services – 501010
- Wireless Telecommunication Services – 501020
- **Utilities – 5510**
- Electric Utilities – 551010
- Gas Utilities – 551020
- Multi-utilities – 551030
- Water Utilities – 551040
- Independent Power Producers & Energy Traders – 551050

Summary of Results

In observing the individual industry trends in free cash margin, the stability seen in the sample-wide data is not apparent for all industries studied. For example, of the 20 four-digit GICS industry sectors studied, during the twelve months ended June 2009 when compared with the twelve months ended June 2008, we saw moderate to substantial improvement in free cash margin in eight industries, relatively stable free cash margin in ten industries, and declining free cash margin in two industries.

Industry sectors with improving free cash margin:

Materials (GICS 1510)
Capital Goods (GICS 2010)
Commercial and Professional Services (GICS 2020)
Transporation (GICS 2030)
Consumer Services (GICS 2530)
Retailing (GICS 2550)
Food and Staples Retailing (GICS 3010)
Food, Beverage and Tobacco (GICS 3020)

Industry sectors with stable free cash margin:

Energy (GICS 1010)
Automobiles and Components (GICS 2510)
Consumer Durables and Apparel (GICS 2520)
Media (GICS 2540)
Household and Personal Products (GICS 3030)
Healthcare Equipment and Services (GICS 3510)
Sofware and Services (GICS 4510)
Technology Hardware and Equipment (GICS 4520)
Telecommunications Services (GICS 5010)
Semiconductors and Semiconductor Equipment (GICS 4530)

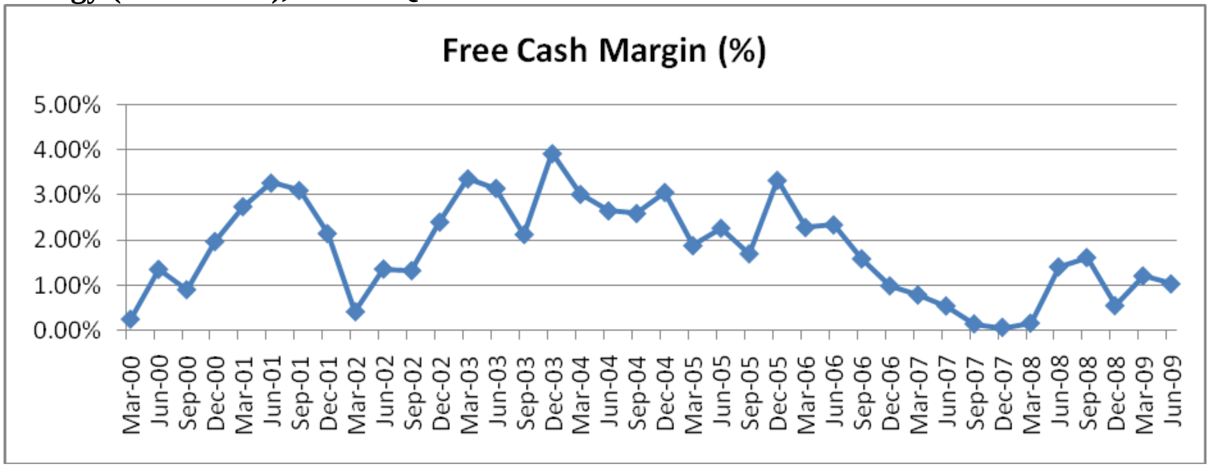
Industry sectors with declining free cash margin:

Pharmaceuticals, Biotechnology and Life Sciences (GICS 3520)
Utilities (GICS 5510)

Please refer to the individual industry spreadsheets, available on our website, for further detail on the industries discussed in this report.

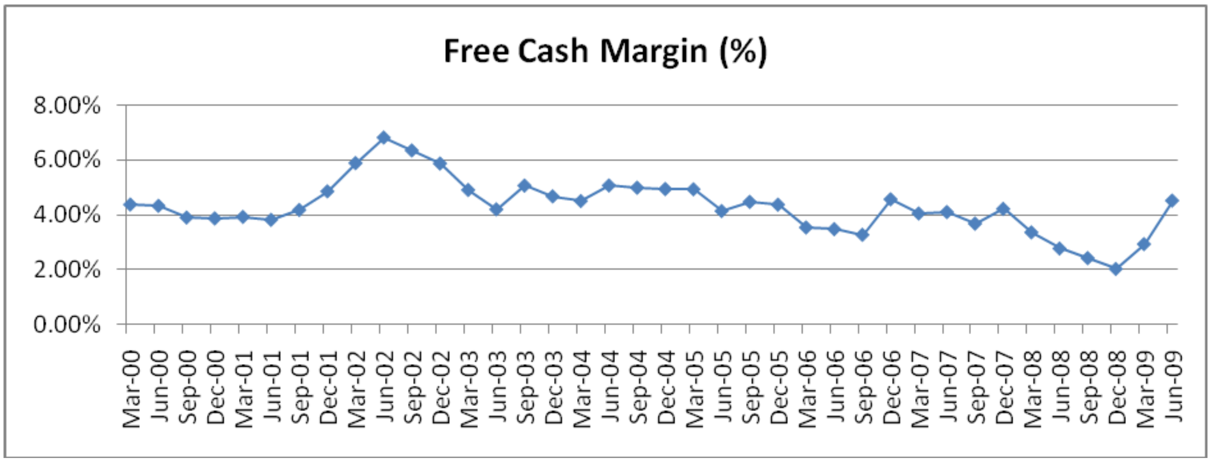
Our results show the following trends in free cash margin:

Energy (GICS 1010), 2000 – Q2 2009



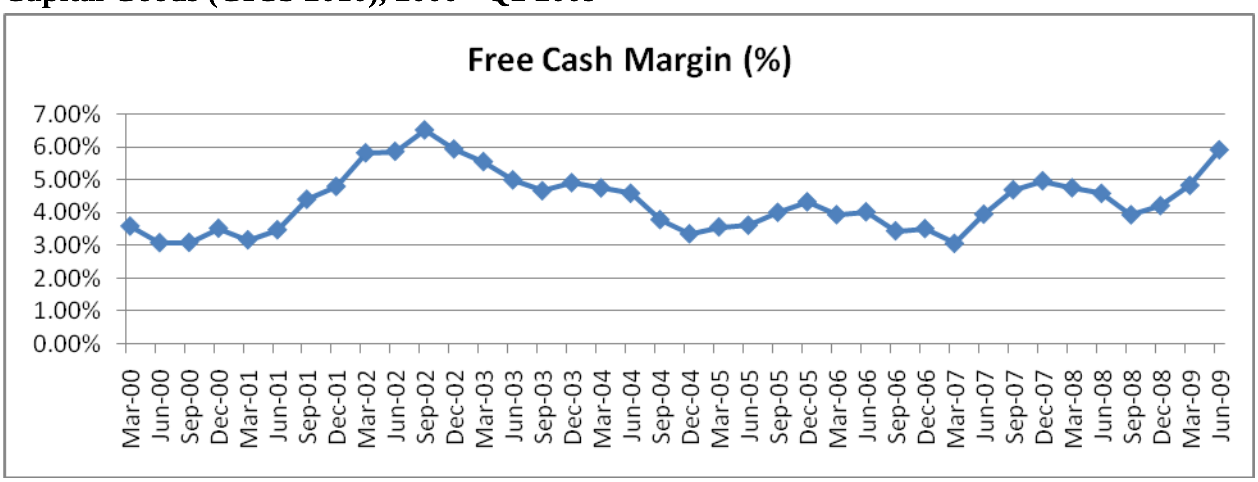
See industry specific spreadsheet for details.

Materials (GICS 1510), 2000 – Q2 2009



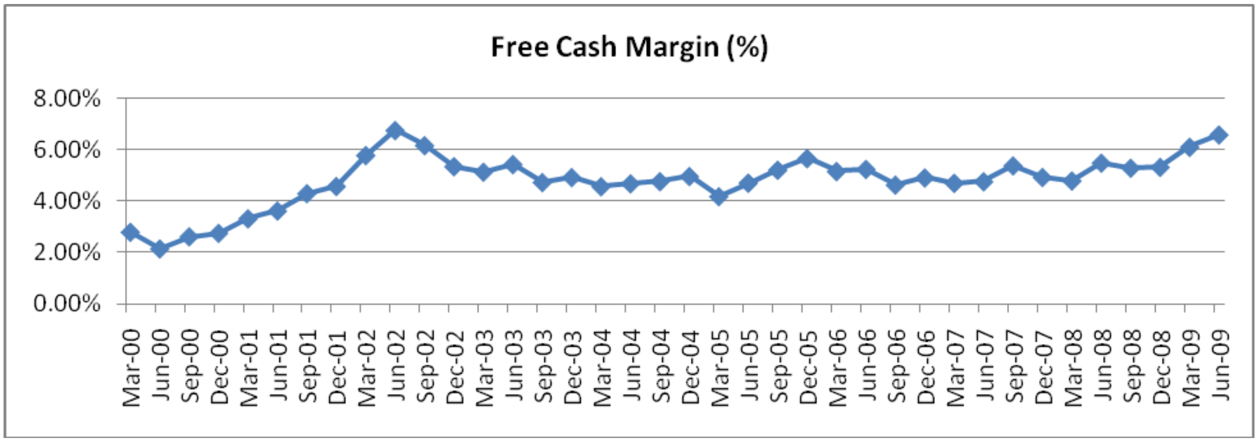
See industry specific spreadsheet for details.

Capital Goods (GICS 2010), 2000 - Q2 2009



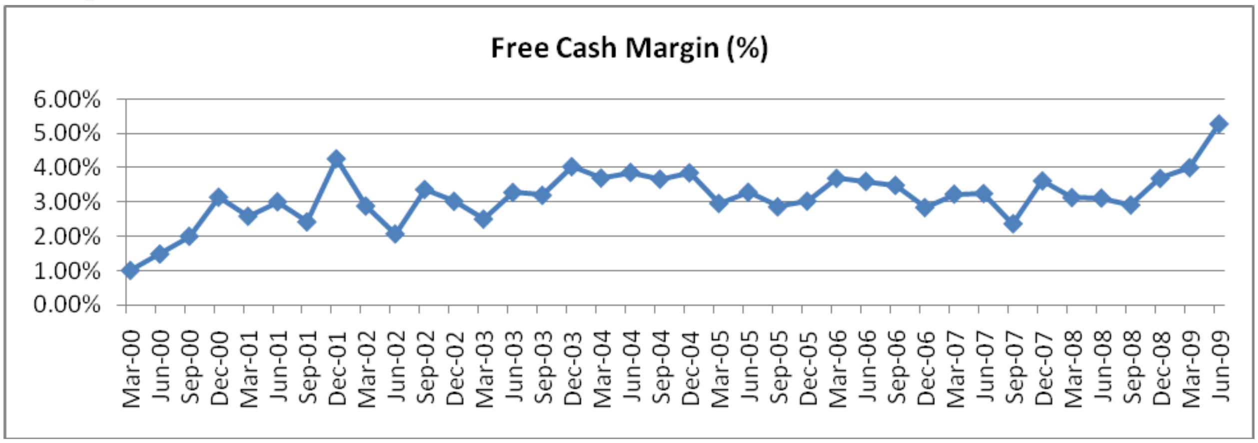
See industry specific spreadsheet for details.

Commercial and Professional Services (GICS 2020), 2000 – Q2 2009



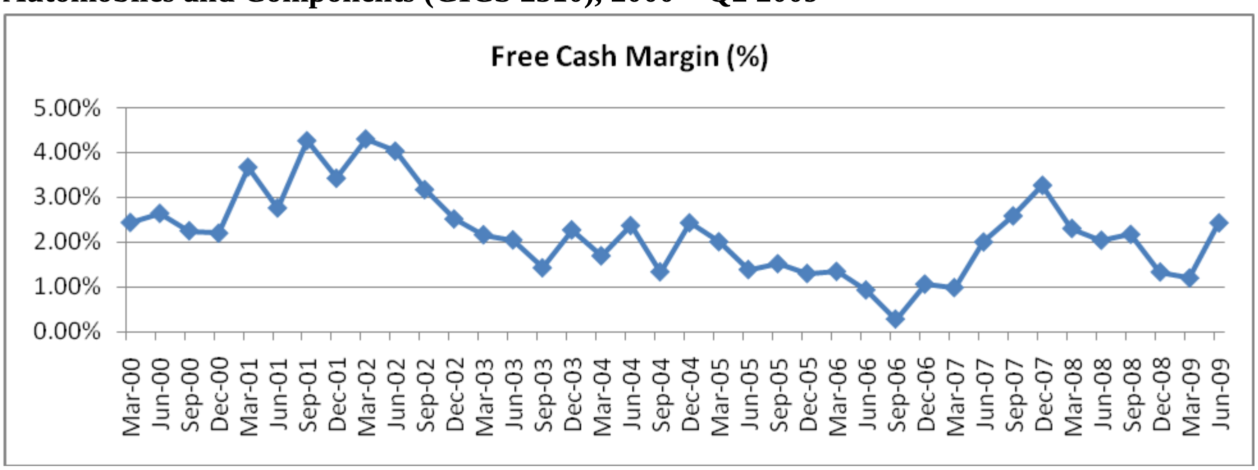
See industry specific spreadsheet for details.

Transporation (GICS 2030), 2000 – Q2 2009



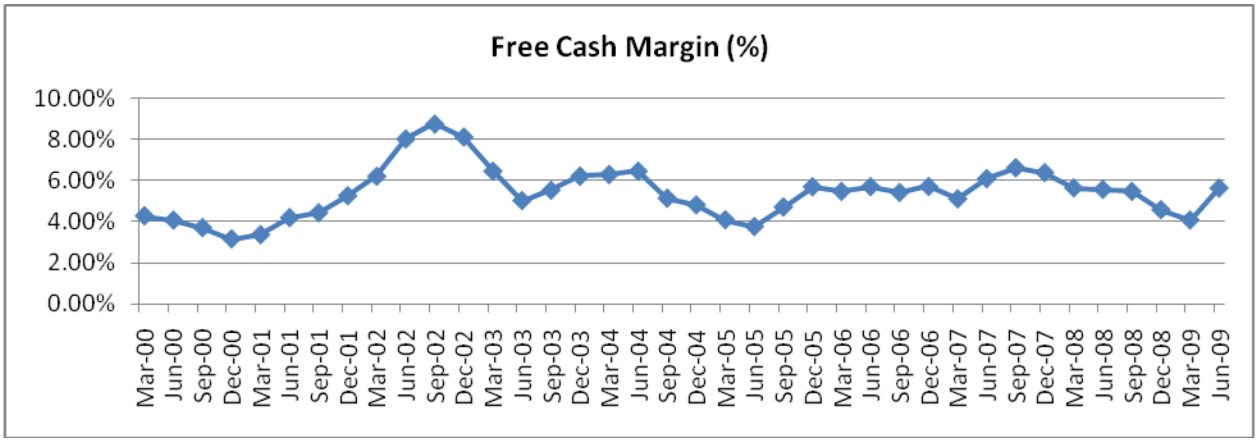
See industry specific spreadsheet for details.

Automobiles and Components (GICS 2510), 2000 – Q2 2009



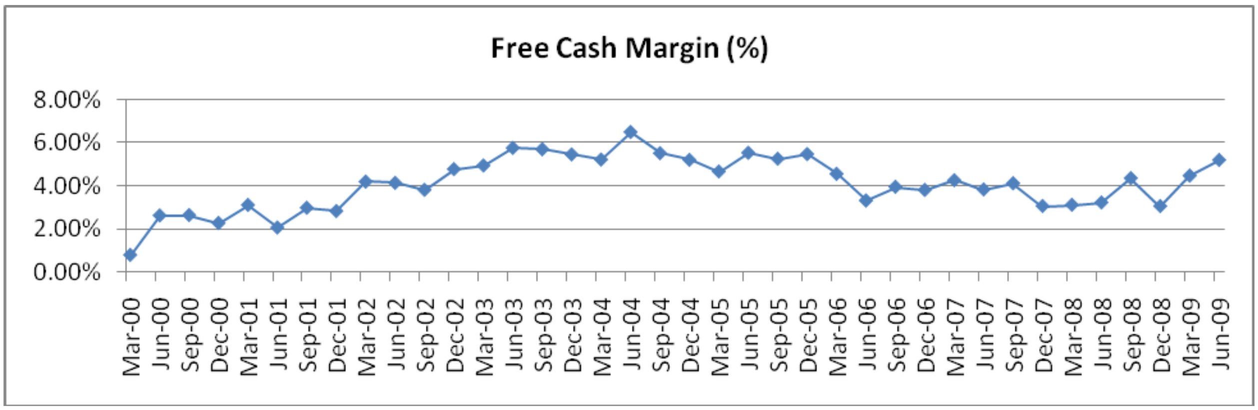
See industry specific spreadsheet for details.

Consumer Durables and Apparel (GICS 2520), 2000 – Q2 2009



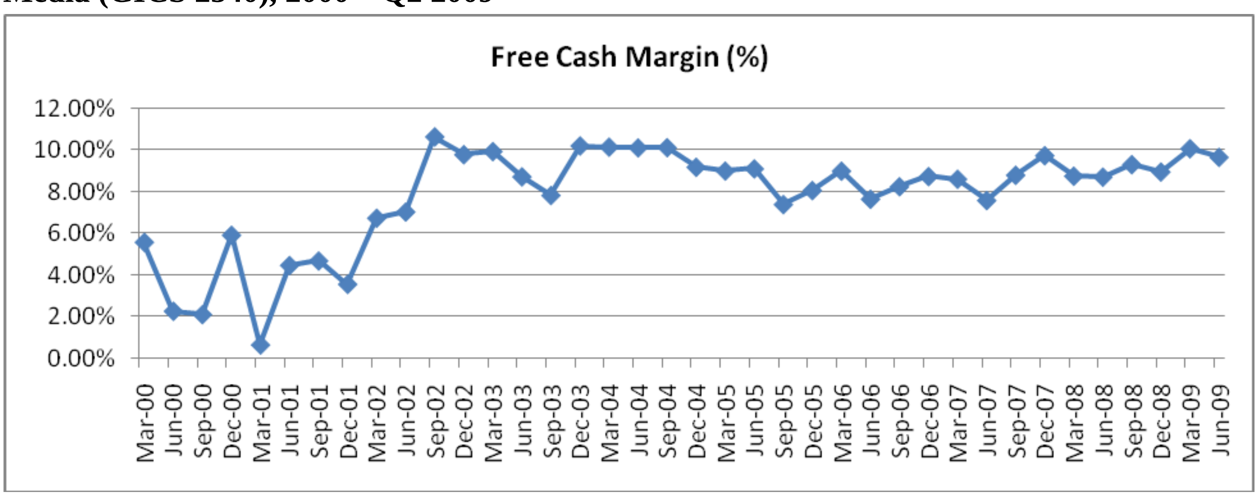
See industry specific spreadsheet for details.

Consumer Services (GICS 2530), 2000 – Q2 2009



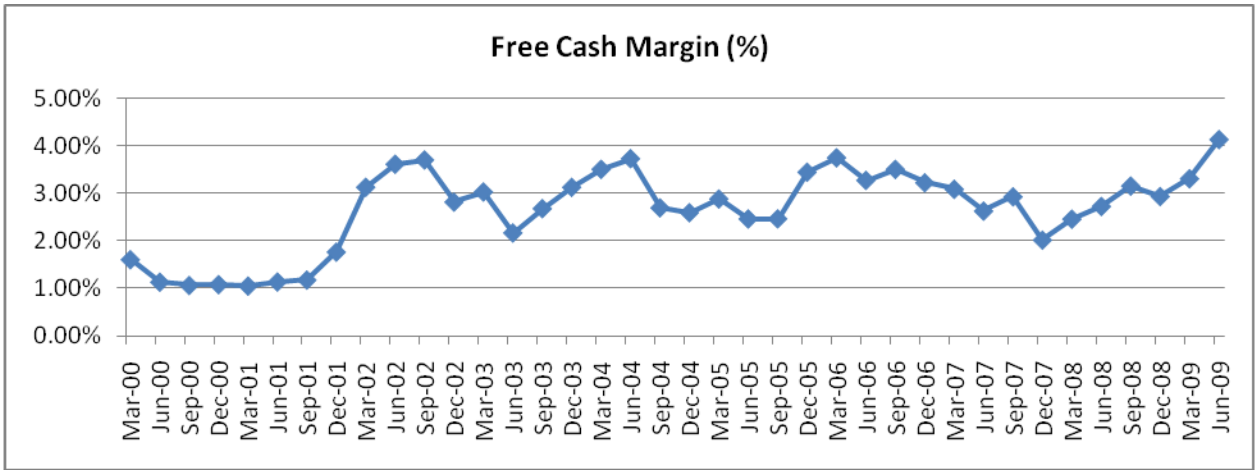
See industry specific spreadsheet for details.

Media (GICS 2540), 2000 – Q2 2009



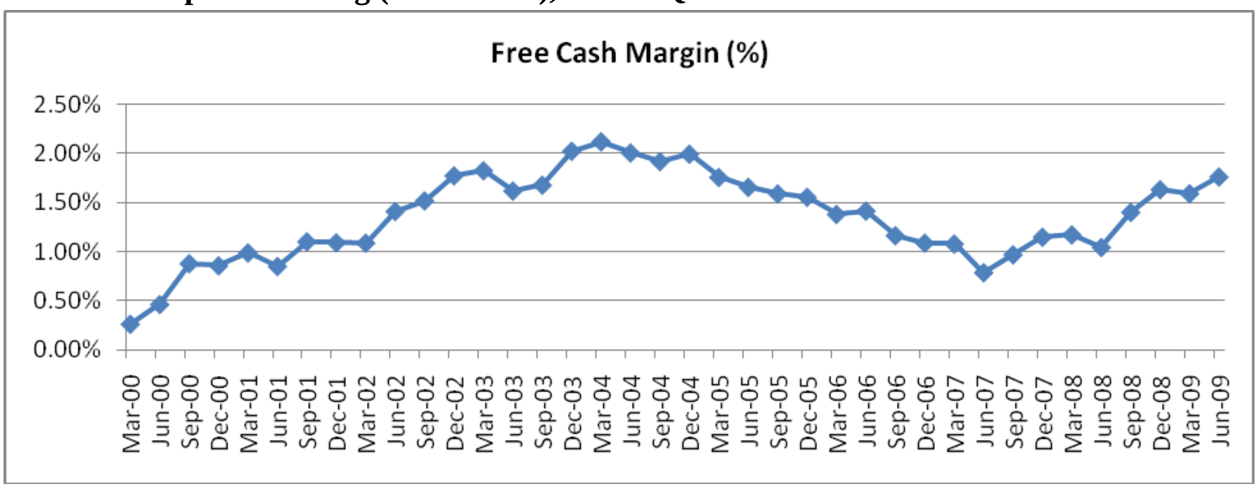
See industry specific spreadsheet for details.

Retailing (GICS 2550), 2000 – Q2 2009



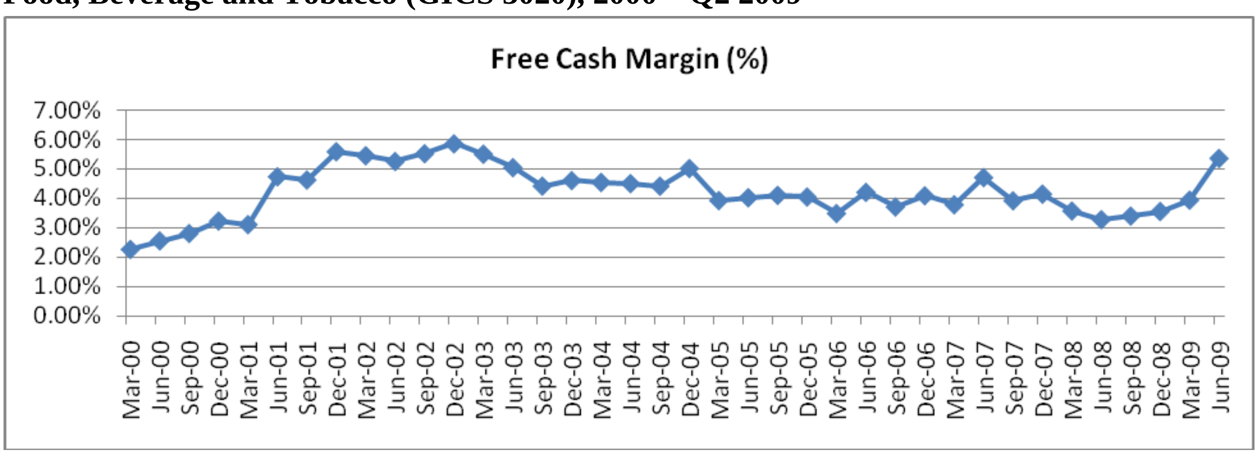
See industry specific spreadsheet for details.

Food and Staples Retailing (GICS 3010), 2000 – Q2 2009



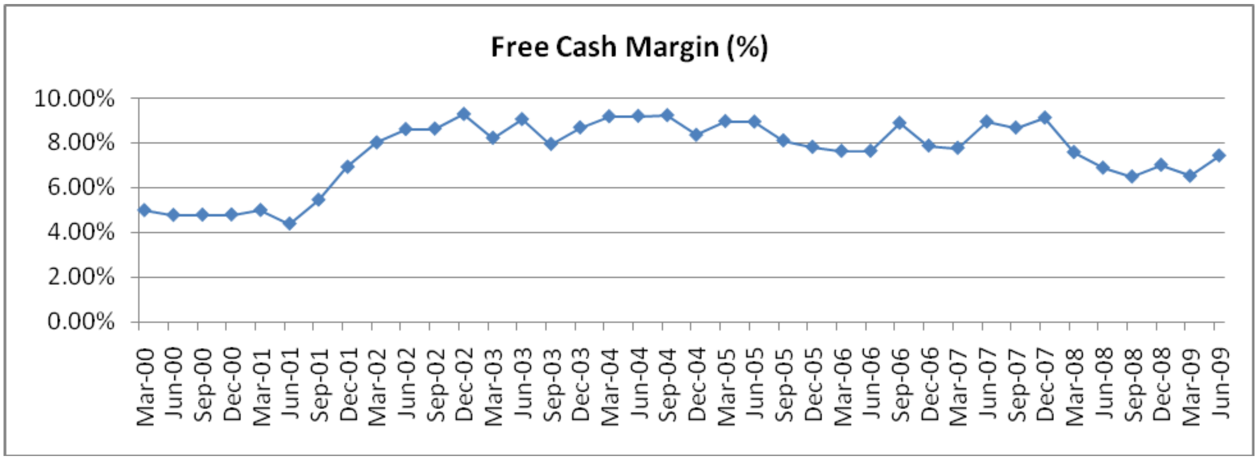
See industry specific spreadsheet for details.

Food, Beverage and Tobacco (GICS 3020), 2000 – Q2 2009



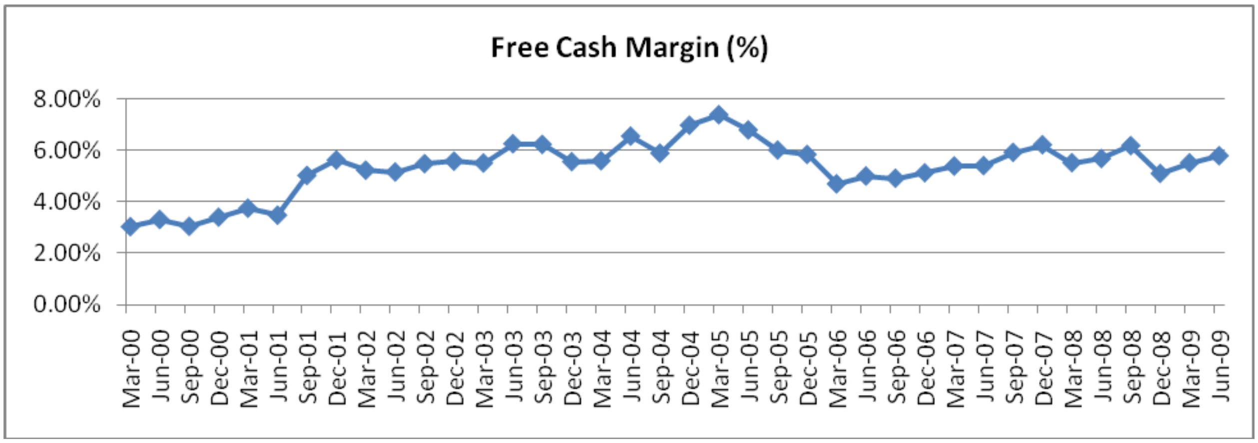
See industry specific spreadsheet for details.

Household and Personal Products (GICS 3030), 2000 – Q2 2009



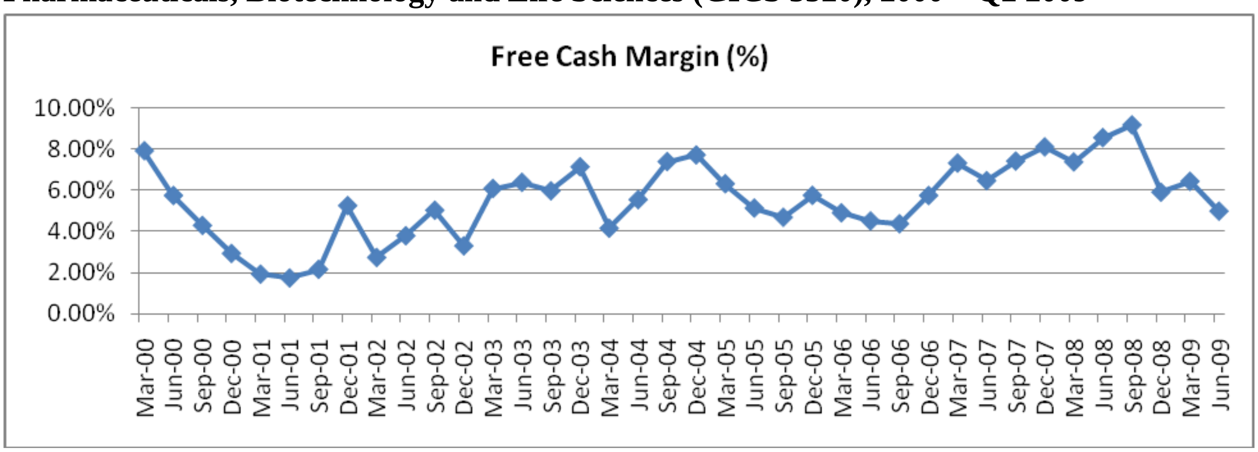
See industry specific spreadsheet for details.

Healthcare Equipment and Services (GICS 3510), 2000 – Q2 2009



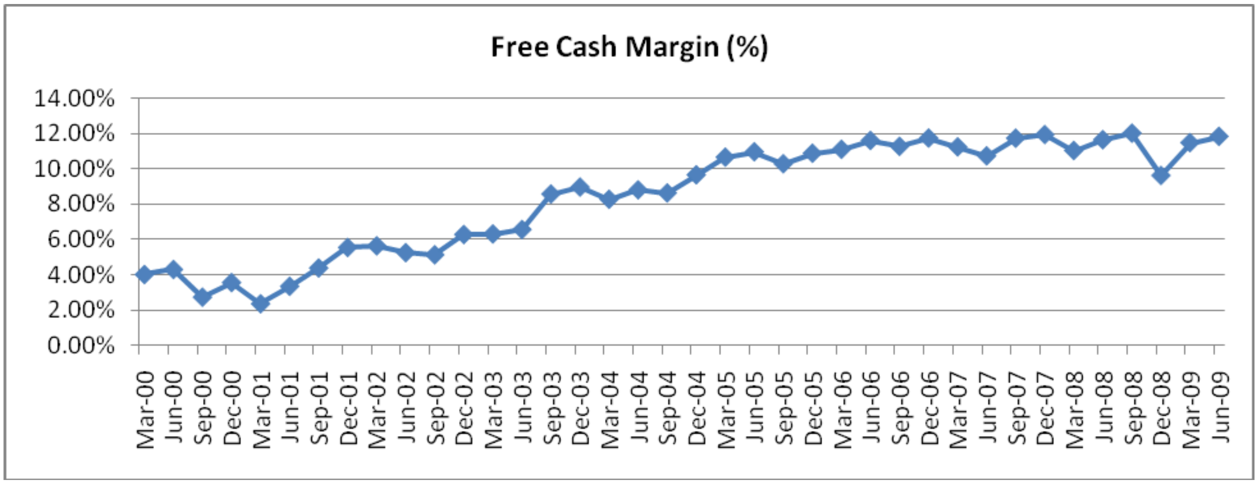
See industry specific spreadsheet for details.

Pharmaceuticals, Biotechnology and Life Sciences (GICS 3520), 2000 – Q2 2009



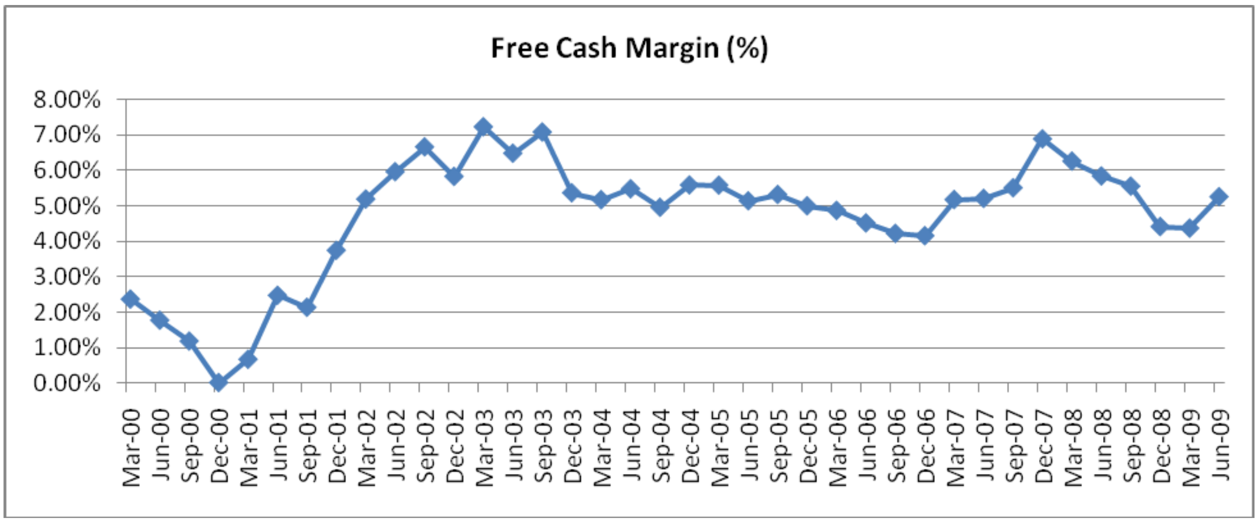
See industry specific spreadsheet for details.

Sofware and Services (GICS 4510), 2000 – Q2 2009



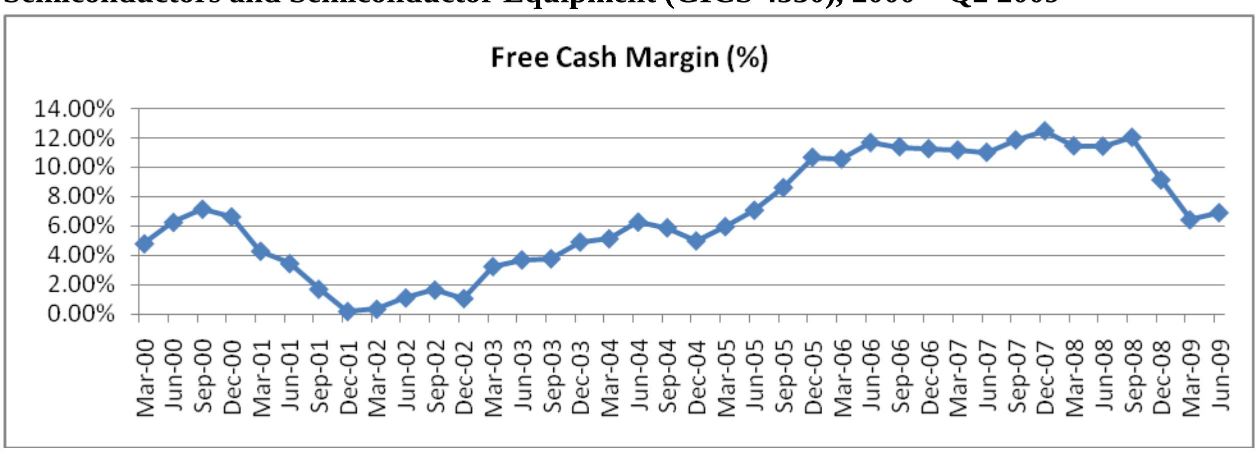
See industry specific spreadsheet for details.

Technology Hardware and Equipment (GICS 4520), 2000 – Q2 2009



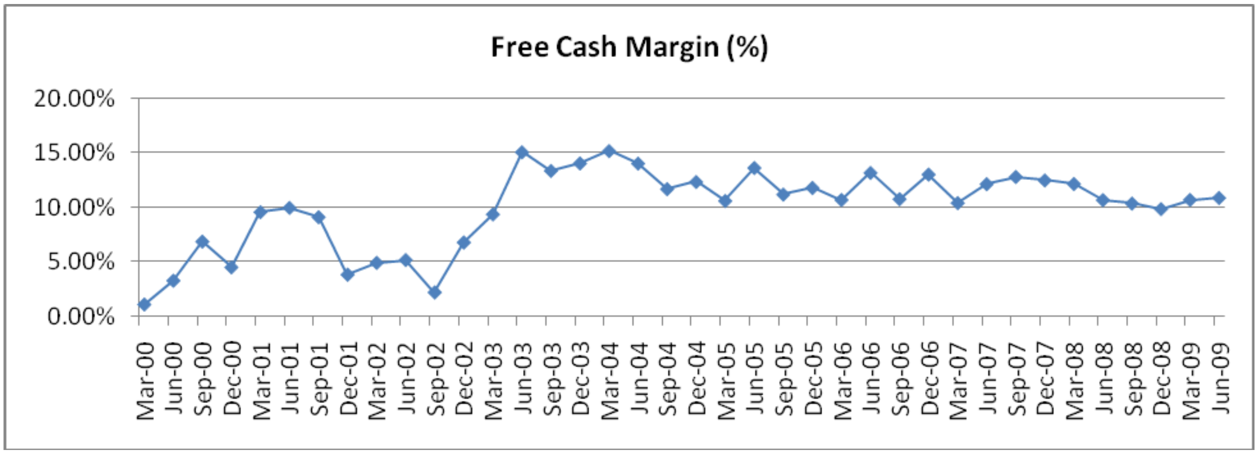
See industry specific spreadsheet for details.

Semiconductors and Semiconductor Equipment (GICS 4530), 2000 – Q2 2009



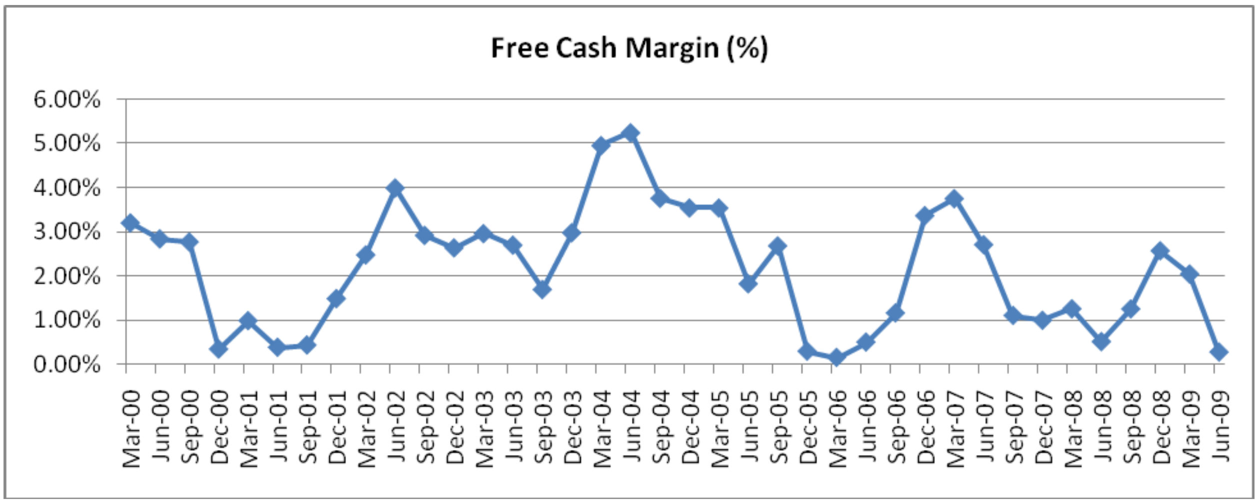
See industry specific spreadsheet for details.

Telecommunications Services (GICS 5010), 2000 – Q2 2009



See industry specific spreadsheet for details.

Utilities (GICS 5510), 2000 – Q2 2009



See industry specific spreadsheet for details.

The Standouts: A Closer Look

The drivers of improvements or declines in free cash margin consist of factors that impact profitability and efficiency. On the profitability front, operating cushion measures operating profit, exclusive of the non-cash expenses, depreciation and amortization. Factors impacting operating cushion consist of gross margin (excluding depreciation and amortization), and SG&A% (excluding depreciation and amortization). Also impacting profitability and a firm's ability to generate free cash flow, but excluded from operating cushion, is income taxes paid, which we measure as a percent of revenue. Capital expenditures do not impact profitability directly, but through depreciation. However, these expenditures are subtracted in computing free cash flow. It is also important to look at capital expenditures because these are investments in fixed assets that will likely improve a company's ability to generate revenue, and subsequent profit, in the future. Like operating expenses and taxes, we measure capital expenditures as a percent of revenue.

On the efficiency front, increases in receivables and inventory consume free cash flow. Increases in accounts payable provide free cash flow. The combination of receivables days plus inventory days less payables days is a firm's cash cycle. Reductions in the cash cycle provide free cash flow, while increases in the cash cycle consume free cash flow. We give consideration to all of these factors when analyzing changes in free cash margin for the standout firms discussed in this section.

Improving free cash margin

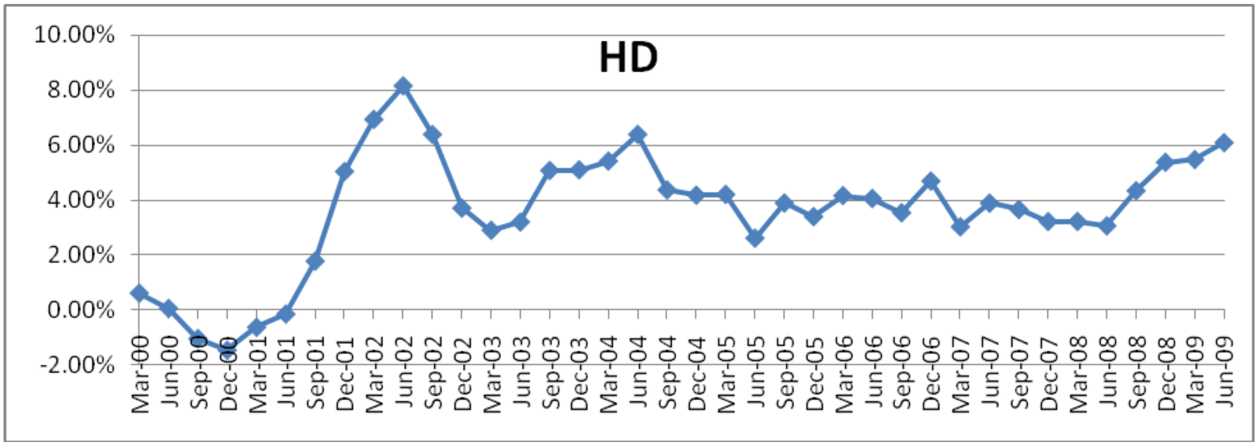
Among the industry sectors with improving free cash margin, there are three groups that stand out. The first is the Retailing industry sector (GICS 2550). For this group, free cash margin improved to 4.13% for the twelve months ended June 2009, up from 2.73% at June 2008. One company in this industry that showed particular improvement is Home Depot, Inc.

Second, we saw improving fortunes in the Food and Staples Retailing industry sector (GICS 3010), where free cash margin increased to 1.76% for the twelve months ended June 2009 from 1.05% for the twelve months ended June 2008. A representative company from this group is Campbell Soup Co.

Finally, free cash margin for the Food, Beverage, and Tobacco sector (GICS: 3020) improved to 5.37% for the twelve months ending June 2009 from 3.28% in June 2008. This was the highest free cash margin for the industry since June 2003 when it was 5.05%. We will investigate Archer-Midland-Daniels Co's noticeable increase in free cash margin.

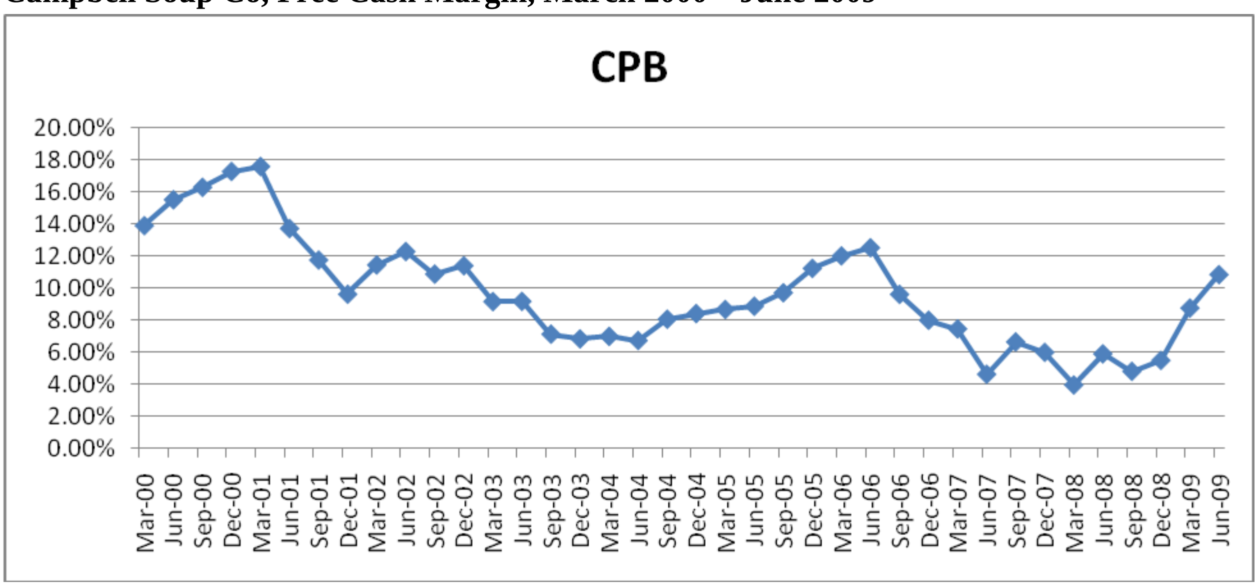
Graphs of free cash margin for these companies across the period studied are provided below. With each graph we also provide a short summary of the primary drivers or factors that we think were behind the observed changes in free cash margin for the selected firms. For more details regarding the industries, please refer to the separate industry spreadsheets found on our website.

Home Depot Inc., Free Cash Margin, March 2000 – June 2009



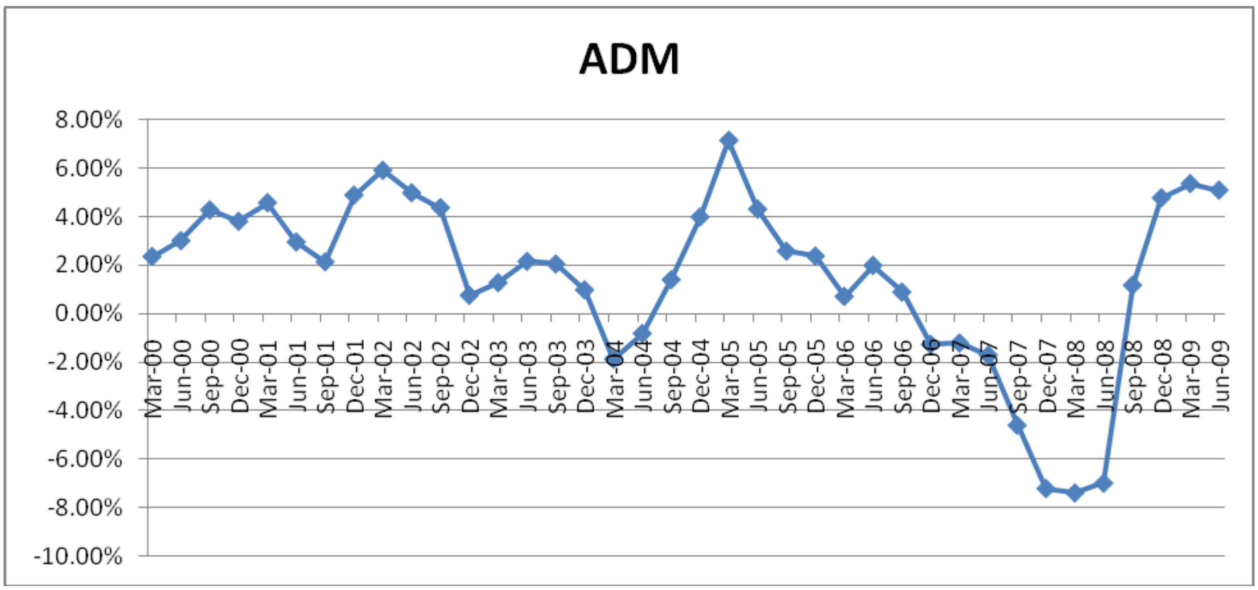
Home Depot Inc (HD). Free cash margin improved to 6.08% for the twelve months ended June 2009 from 3.06% for the twelve months ended June 2008. There were multiple factors driving this substantial increase in free cash margin. Operating cushion declined from 11.29% in June 2008 to 10.34% in June 2009. The cash cycle increased slightly from 30.2 revenue days in June 2008 to 32.51 revenue days in June 2009. The main component driving the observed improvement in free cash margin was a reduction in capital expenditures, which fell to 1.59% of revenue in June 2009 from 3.49% of revenue in June 2008. This is the lowest reported capital expenditures to revenue % that we have seen in the last four years. It appears Home Depot is increasing its free cash margin by decreasing its capital expenditures to more than offset the decrease in operating margin. Reductions in capital spending do not provide for a sustainable source of improvement in free cash margin. In the absence of improvements in profitability or the cash cycle, future increases in capital expenditures will hurt free cash margin.

Campbell Soup Co, Free Cash Margin, March 2000 – June 2009



Campbell Soup Co (CPB). Free cash margin improved to 10.84% for the twelve months ended June 2009 from 5.89% for the twelve months ended June 2008. The company's operating cushion was relatively unchanged during the period of June 2008 – June 2009. Capital expenditures as a % of revenue actually increased to 4.54% for the twelve months ending June 2009 from 3.69 % for the same period ending June 2008. The cash cycle, measured in revenue days, increased to 37.67 in June 2009 from 33.95 in June 2008, driven primarily by an increase in inventory days. Driving the improvement in free cash margin is a reduction in the company's income taxes paid as % of revenue, to 1.54% for the twelve months ended June 2009 from 6.51% in June 2008. We examined the company's public filings for the year ended December 2008 and noted that income taxes paid declined to $144 million for the year versus $521 million in the year ended December 2007, even as pre-tax income and the effective tax rate increased. From the filings we were not able to discern why the reported amount of income taxes paid declined as they did. We do expect income taxes paid to increase in future periods, which will weigh on free cash margin.

Archer-Daniels-Midland Co., Free Cash Margin, March 2000 – June 2009



Archer-Daniels-Midland Co (ADM). Free cash margin improved to 5.09% % for the twelve months ended June 2009 from -7.00% for the twelve months ended June 2008. Operating cushion and capital expenditures as a % of revenue stayed relatively flat during this period. The improvement in free cash margin was driven by a large decline in the cash cycle from 78.94 revenue days for the twelve months ending June 2008 to 49.09 revenue days for the same period ending June 2009. A drop in accounts receivable was the primary reason for the decline in the cash cycle.

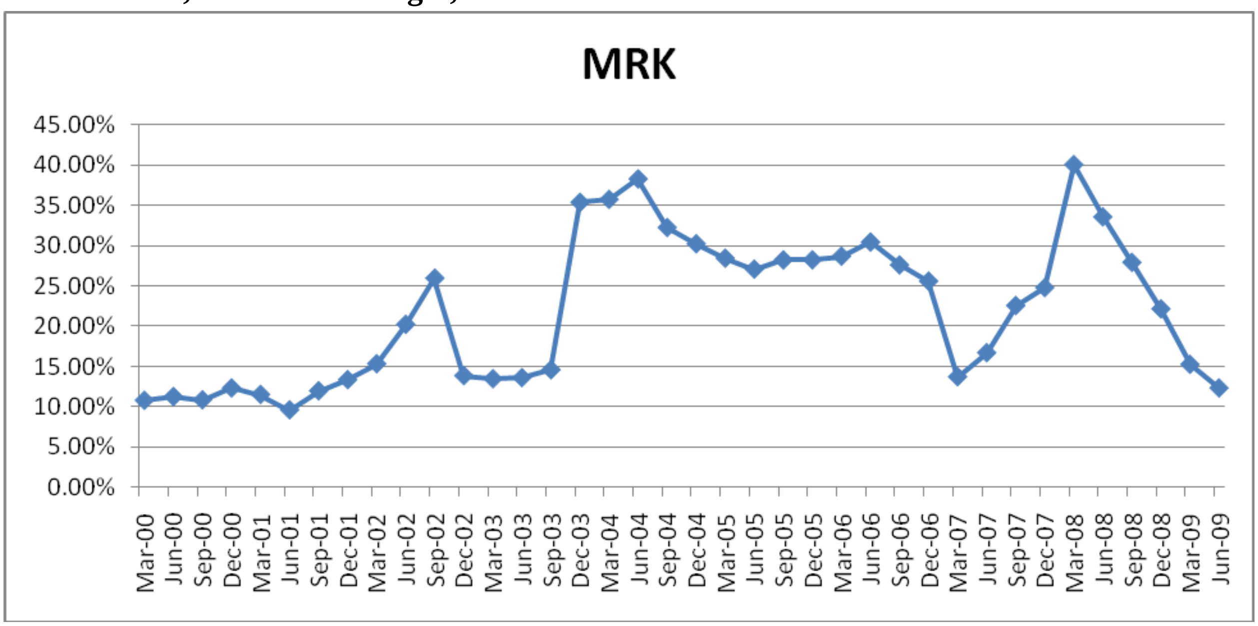
Declining free cash margin

There are two industries that exhibited a notable declining trend in free cash margin. The first is the Pharmaceuticals, Biotech, and Life Sciences industry sector (GICS 3520), where free cash margin declined to 4.98% for the twelve months ended June 2009 from 8.54% in the June 2008 period. Merck Co is a representative company in this group that showed a noticable decline in free cash margin.

The Utilities industry (GICS 5510), also saw a substatial decrease in free cash margin. It declined to 0.28% for the twelve months ended June 2009 from 2.57% for the twelve months ended December 2008. The two representative companies that we look at here are Pacific Gas & Electric and Southen Company.

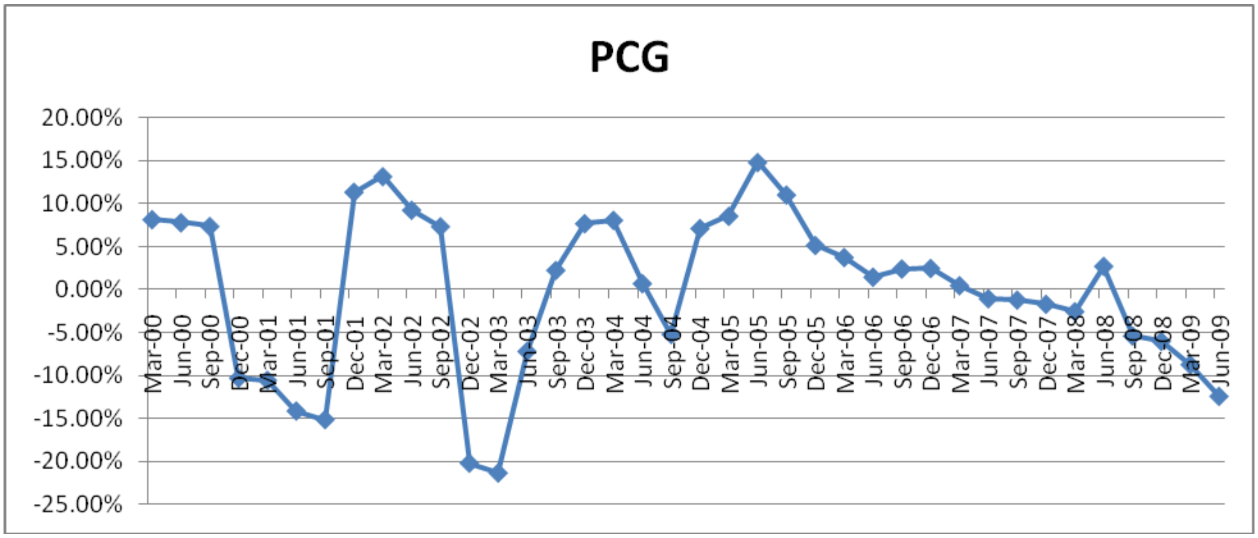
Graphs of free cash margin for these companies across the period studied are provided below. With each graph we also provide a short summary of the primary drivers or factors that we think were behind the observed changes in free cash margin for the selected firms. For more details regarding the industries, please refer to the separate industry spreadsheets found on our website.

Merck & Co., Free Cash Margin, 2000 – June 2009



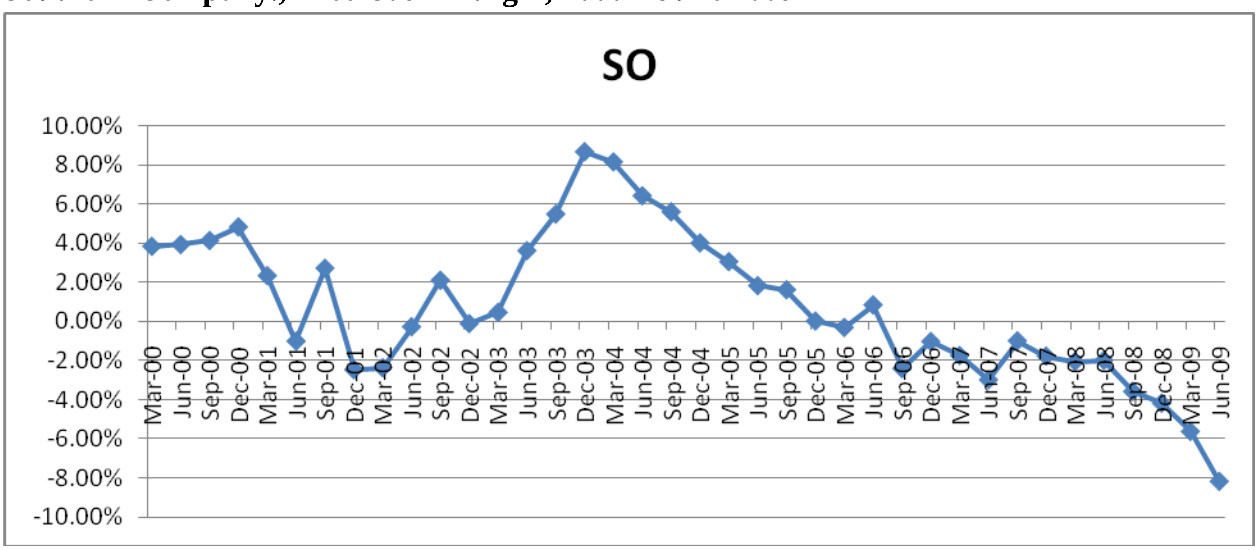
<u>Merck & Co</u>. Free cash margin declined to 12.29% for the twelve months ended June 2009 from 33.53% for the same period in June 2008. Operating cushion increased incrementally to 35.51% in 2009 from 34.44% in 2008. The decline in free cash margin was mainly due to an increase in the company's cash cycle to 83.04 revenue days in June 2009 from 80.07 revenue days in June 2008. Additionally, there was an increase in capital expenditures as a % of revenue to 5.44% from 4.84% and an increase in research and development costs as a % of revenue from 19.61% in June 2008 to 22.26% in June 2009. Finally, also impacting the company's free cash margin was an increase in prepaid expenses and a decline in accrued expenses payable.

Pacific Gas & Electric Corp., Free Cash Margin, 2000 – June 2009



Pacific Gas & Electric Corp. (PCG) Free cash margin declined to -12.42% for the twelve months ended June 2009 from 2.74% for the twelve months ended June 2008. The main driver of this decline in free cash margin was an increase in capital expenditures. Capital expenditures as a % of revenue increased to 28.64% for the twelve months ending June 2009 from 22.57% for the same period ending June 2008. Operating cushion rose to 31.27% in June 2009 from 28.45% in June 2008. Thus, even though the company's free cash margin declined, recent developments, including the noted improvement in operating cushion and the increase in capital expenditures bode well for free cash margin in future periods.

Southern Company., Free Cash Margin, 2000 – June 2009



Southern Company (SO). Free cash margin declined to -8.18% for the twelve months ended June 2009 from -2.00% for the twelve months ended June 2008. The main cause of the decrease in free cash margin came from an increase in the cash cycle to 59.77 revenue days for the twelve months ending in June 2009 from 51.36 revenue days for the same period ending June 2008, caused primarily by an increase in inventory (esp. fossil fuels). Operating cushion stayed constant over the period from June 2008 to June 2009. In fact, operating cushion has stayed right around 31 – 32% for the past 15 quarters. Additionally, capital expenditures as a % of revenue declined slightly to 23.53% in June 2009 from 25.25% in June 2008.

Conclusions

In summary industry sectors with improving free cash flow were Materials (GICS 1510), Capital Goods (GICS 2010), Commercial and Professional Services (GICS 2020), Transporation (GICS 2030), Consumer Services (GICS 2530), Retailing (GICS 2550), Food and Staples Retailing (GICS 3010), and Food, Beverage and Tobacco (GICS 3020). Industry sectors with declining free cash margin were Pharmaceuticals, Biotech, and Life Sciences industry (GICS 3520) and Utilities (GICS 5510). We will continue to update our findings, via our webpage, as new quarterly financial data become available.